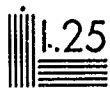




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MICROCOPY RESOLUTION TEST CHART

NATIONAL BUREAU OF STANDARDS-1963-A

# DOCUMENT RESUME

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## ABSTRACT

The Vermont State Board of Education adopted a capital outlay program in February 1974, that requires local school districts to file short- and long-range facility needs plans based on Department of Education models. This document, excerpted from State Board of Education minutes, describes the minimum requirements for receiving state aid for school construction. Measures of needs, maximum eligible building costs, eligible costs or spaces, noneligible costs of spaces, alterations and additions, space allowance formulas, and basic unit cost increments eligible for state construction aid are described. (DW)

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STATE BOARD OF EDUCATION

Excerpt from minutes of meeting of January 15, 1974

The State Board of Education voted to establish the effective date for implementation of the Capital Outlay Proposal as February 1, 1974. It further voted that short range plans (1 year) for facility needs, based on models developed by the Department of Education, be on file with School Administrative Services Division on or before July 1, 1974; and that the long range plans (5 years) be on file with School Administrative Services on or before December 1, 1974 and annually on December 1 thereafter.

### Measures of Needs:

Measures of needs for capital facilities must be designed to gain an aggregate of the various components of each school starting with the instructional programs for designated pupil needs as the basic module. All local school districts shall institute long range (5 years) and short range (1 year) school facility needs plans based on the criteria of needs contained within this document and models to be developed by the Department of Education. Such plans are to be submitted to the Division of Administrative Services. The following criteria for determining short and long range (5 years) school facility needs should be considered, in, but not limited to, a plan for capital outlay by both the state and local governmental agencies:

1. Growth, related to enrollment fluctuations.
2. Present capital outlay inventory (present situation), condition, age, etc. of buildings.
3. Curriculum expansion.
4. Consolidation for curriculum improvement and efficiency.
5. Natural disaster - fire, flood, storm, etc.
6. Local effort as related to local ability.
7. Unusual costs; site development, equipment, fees, furnishings and like costs.

Facility need plans shall be updated each year by the local districts and through a coordinated local-state effort, priorities established for those projects to be funded each year.

### Maximum eligible building costs for state participation purposes:

The formulas and procedures that follow are intended to predetermine the maximum eligible cost for state participation purposes on any school construction project eligible for state construction aid under Vermont statutes and State Board of Education policy. The "Maximum Eligible Cost" shall be determined by applying the formulas to the approved educational specification for the

proposed project but shall in no way limit the amount of construction cost that a local district may authorize or expend on a project. If the local district wishes to authorize construction costs in excess of this figure, it may, but the state construction aid will be calculated on the basis of the "Maximum Eligible Costs" and any costs in excess of this will be borne by the local district. The space allocation formulas shall be subject to review by the State Board of Education every three years after adoption of these procedures.

Definitions:

For purposes of determining eligibility, the following definitions shall apply:

URGENTLY NEEDED

Urgently needed project shall be defined as one without which necessary facilities cannot be provided to carry out a suitable educational program or without which the district fails to meet state or federal regulations.

EXTENSIVE ALTERATIONS AND ADDITIONS

Extensive addition or alteration shall be defined as one for which the estimated cost exceeds \$10,000 or 10% of the estimated value of the existing structure, whichever is less.

Eligible Costs or Spaces:

1. Building construction, including instructional and auxiliary buildings and administrative spaces where a minor part (10%) of the educational construction program, or where providing central offices for unified districts or supervisory unions.
2. Fees, clerk of the works, legal fees, architectural and engineering fees.
3. Razing existing on-site structures.
4. Installing of on-site utilities (or where legal right-of-way is obtained by the school district), including grading, drainage facilities, power plants, sewer, water, wells and pumps, waste treatment, electricity, roads, walks, parking areas and lighting.
5. Athletic fields and other site development projects necessary to provide exterior facilities necessary to carry out an approved educational program.
6. Landscaping.
7. Construction to meet state agency regulations, i.e.: safety, environmental, OSHA. Alterations and additions of a cost in excess of \$10,000 or 10% of the estimated value of the existing building, whichever is less.
8. Buildings for storage and maintenance of vehicles.

Partially Eligible Costs or Spaces:

1. Swimming pools, skating rinks, theaters, other structures or spaces with valid educational functions but primarily programmed for community use and/or revenue production are to be counted into the space allowances at a percentage of programmed space involved relating educational use to total use; such percentage to be determined by the Commissioner of Education. Space is to include all related auxiliary spaces, such as locker rooms, changing rooms, spectator space and mechanical equipment spaces.
2. Auxiliary spaces designed for functions shared with other agencies or services, i.e.: town clerk-school clerk's office, to be counted into space allowances at a percentage of programmed area relating educational use or occupancy to total use or occupancy; such percentage to be determined by the Commissioner of Education.

Non-eligible Costs or Spaces:

1. Structures or spaces designed exclusively for use of other agencies or services such as community centers, town officers, civil defense shelters, except where such spaces are also scheduled for educational use.
2. Repair or maintenance projects except where such work is incidental to a major construction project.
3. Minor projects - defined as projects of less than \$10,000 total cost; or remodeling or additions of a cost of less than 10% of the estimated value of the original building, whichever is less.
4. Stadiums.

Questionable Costs or Spaces:

1. Costs or spaces not falling within the list of eligible or partially eligible costs or spaces and not specifically excluded as non-eligible shall be submitted to the Commissioner of Education for status determination prior to project procedure, or shall automatically be considered as not eligible for construction aid.
2. Districts aggrieved by the decision of the Commissioner of Education may appeal to the State Board of Education.

Alterations and additions:

Determine total space allowance for project from Space Allowance Tables.  
To determine space allowance for addition, deduct from the total space allowance the area of the existing building adjusted for its current age status by multiplying the area by the applicable use factors listed below.



The maximum eligible costs for state participation purposes shall be determined by multiplying the area in the existing building that is programmed for remodeling by its unit cost increment and adding the space allowance for the addition by its unit cost increment, etc.

Use factors for existing structures:

Basement areas	25%
Above grade pre-1945 facilities	70%
Above grade facilities constructed since 1945	80%

Example: Program requirements indicate a total space allowance of 40,000 square feet for a proposed K-6 elementary school. The existing building of 1930 vintage, has 10,000 square feet of basement (not to be remodeled) and two above grade floors of 10,000 square feet each.

#### Space Allowance

Total space allowance	40,000 sq. ft.
Existing Building	
Basement 10,000 sq. ft. x 25% =	2,500 sq. ft.
Upper Floors 20,000 sq. ft. x 70% =	<u>14,000 sq. ft.</u>
	16,500 sq. ft. <u>16,500 sq. ft.</u>

Space allowance for addition 23,500 sq. ft.

#### Maximum cost for state participation purposes (theoretical project)

Work in existing building	20,000 sq. ft. @ \$14.00/sf	\$ 280,000
Addition	23,500 sq. ft. @ \$30.45/sf (\$29.00 + 5%)	715,575
Site work	23,500 sq. ft. @ \$ 2.50/sf	<u>58,750</u>
Maximum cost for state participation purposes		\$1,054,325

### Partial Projects:

On partial projects relating to existing buildings, i.e.: playing fields, approved new lighting or ventilating systems, etc., the maximum cost for state participation purposes shall be determined by applying a factor to the cost resulting from the tables and the area of the existing structure. This factor, relating the type of project to a total project, will vary with the project character and will be determined for each project in question by consultation with the Division of Administrative Services.

### Minimum Requirements:

Minimum requirements regarding facility planning and construction will continue to be those included in Planning Educational Environments, adopted by the State Board of Education on July 18, 1972.

### Local Leeway and Flexibility:

Local leeway would be possible for those districts who wished to go beyond the Recognized Project Cost or go beyond the total space allocations indicated. However, no state grants would apply beyond the Recognized Project Cost.

Flexibility, based on the educational plan, would be possible within the Recognized Project Cost for the local district to determine space priorities and allocations as it wishes.

SCHOOL CONSTRUCTION FORMULAS - SPACE ALLOWANCESSenior High School

Number of pupils	500 or less	501-700	701-1000	1001-1200	1201 and Over
<b>A. Subject Areas</b>					
1. General classroom space: 40 sq.ft. per pupil @ 60% of enrollment					
2. Library (Resource Center) Reading Room 40 sq.ft. per pupil @ 10% of enrollment					
Storage, conference room, office workroom, visual aids, dextroom	600	900	1,000	1,100	1,200
3. Health-Nurse's Suite	600	600	700	750	800
4. Cafeteria and Kitchen	3,500	5,000	6,000	6,500	7,000
5. Physical Education	10,900	12,000	18,000	18,000	24,000
5a. Swimming pool or skating rink	Percentage as determined by Commissioner of Education				
6. Art	1,800	1,800	3,200	3,500	4,000
7. Consumer Education and Home Economics	2,500	2,800	3,000	3,500	4,000
8. Music	2,200	2,500	2,900	3,500	3,500
9. Guidance	500	600	700	800	1,000
10. Science	4,900	6,400	8,000	9,600	12,500
11. Business Ed.	4,000	4,000	5,000	5,000	6,200
12. Language Lab	900	900	900	1,800	1,800
13. Industrial Arts	3,500	4,900	6,200	6,200	8,600
14. Pupil Activities	700	1,000	1,400	2,000	2,400
15. Teachers' Rooms	600	1,000	1,200	1,400	1,600
16. Auditorium, including Lobby, Stage and storage	6,400	8,400	10,000	10,000	12,000
16a. Theater	Percentage as determined by Commissioner of Education				
17. Administration	700	1,400	1,400	2,100	2,800

	500 or less	501-700	701-1000	1001-1200	1201 and Over
B. Teaching Stations - Total					
C. Toilets, Corridors, Walls, Boiler Rooms and Services					
D. Total Square Feet per Building					
E. Total Square Feet per Pupil					

25% of net square footage

- NOTE: 1. If Vocational Facilities, Special Education Facilities, etc. are included in the program, the approved programmed areas will be added to B - total teaching station area.
2. Auxiliary spaces for shared facilities such as town clerk-school clerk's offices to be added to B at percentage of programmed area to be determined by Commissioner of Education.

Middle School

## EXHIBIT F.

Number of pupils		500 or Less	501-700	701-1000	1001 and Over
A. Subject Areas					
1. General classroom space: 40 sq.ft. per pupil @ 60% of enrollment					
2. Library (Resource Center) Reading Room 40 sq.ft. per pupil @ 10% of enrollment					
Storage, conference room, offices, workroom, visual aids		500	700	1,000	1,100
3. Health-Nurse's Unit		600	600	700	800
4. Physical Education		8,000	9,000	11,000	13,000
5. Cafeteria and Kitchen		3,500	5,000	6,000	7,000
6. Art		1,500	2,000	2,500	3,000
7. Consumer Education		2,500	2,800	3,000	3,500
8. Music		2,000	2,400	2,800	3,000
9. Guidance		500	600	700	800
10. Science		3,500	5,000	7,000	8,000
11. Business Education		1,000	1,500	2,000	2,500
12. Language Lab		900	900	900	1,800
13. Industrial Arts		2,400	3,000	5,000	6,000
14. Pupil Activities		400	700	700	700
15. Teachers' Rooms		400	700	700	700
16. Administration		700	1,400	1,400	2,100

1001 and Over

701-1000

501-700

500 or less

B. Teaching Stations  
Total Square FeetC. Toilets, Corridors, Walls,  
Boiler Rooms and Services  
@ 25% of net square feet

D. Total Square Feet per Building

E. Total Square Feet per Pupil

- NOTE:
1. If Vocational Facilities, Special Education Facilities, etc. are included in the program, the approved programmed areas will be added to B- total teaching station area.
  2. Auxiliary spaces for shared facilities such as town clerk-school clerk's offices to be added to B at percentage of programmed area to be determined by Commissioner of Education.
  3. If swimming pools, skating rink or theater is included it is to be counted at percentage of programmed area to be determined by Commissioner of Education, added to B-total teaching station area.

## Elementary Schools or Elementary Schools including Grades 7 and 8

Number of Pupils	100 or Less	101-300	301-600	601 and Over
A. Subject Area				
1. General classroom space 40 sq.ft. per pupil				
2. Kindergartens	1,500	1,500	1,500	3,000
3. Multipurpose Room including kitchen, stage and locker rooms	1,800	3,200	4,800	9,000
3a. Cafeteria (including Kitchen)			1,800	3,600
4. Library (Resource Center) 40 sq. ft. per pupil @ 10% of enrollment (750 sq.ft. minimum)				
Storage, workroom, etc.	100	300	600	1,000
5. Health-Nurse's Unit	100	300	400	600
6. Administration	300	900	1,200	1,500
7. Conference Room	100	200	300	300
8. Teachers' Room	200	300	300	300
9. Art-Activities	200	900	900	1,200
10. Music	200	300	500	800
11. Industrial Arts and Consumer Education	2,000	2,500	4,000	6,000
11a. Industrial Arts (Below 7th Grade)			900	1,800



	100 or Less	101-300	301-600	601 and Over
12. Language Lab (7th and 8th Grades)		900	900	900
13. Science		900	900	900
B. Teaching Stations Total square feet				
C. Toilets, Corridors, Walls, Boiler Rooms, and Services @ ( ) of Net Square Feet	(33%)	(30%)	(25%)	(25%)
D. Total Square Feet per Building				
E. Total Square Feet per Pupil				

- NOTE: 1. If Vocational Facilities, Special Education Facilities, etc. are included in the program, the approved programmed areas will be added to B-total teaching station area.
2. Auxiliary spaces for shared facilities such as town clerk-school clerk's offices to be added to B at percentage of programmed area to be determined by Commissioner of Education.
3. If swimming pools, skating rink or theater is included it is to be counted at percentage of programmed area to be determined by Commissioner of Education, added to B-total teaching station area.



DEPARTMENT OF EDUCATION  
Administrative Field Services  
July 1, 1974

Capital Outlay Financing

Addendum No. 1 - Update of unit costs

In accordance with Paragraph E of Page 13 of the Capital Outlay Financing Proposal, the basic cost increments are subject to updating (to the nearest \$.50 per square foot) each July 1 on the basis of the change in the New England Cost Index. At the time of adoption of this proposal, the F.W. Dodge Corporation Building Cost Calculator and Evaluation Guide reported an index based on historical costs for Burlington, Vermont of 425.2 as of September 1973 (reported December 1973). The six month period ending March 1974 (reported June 1974) showed an increase to 452.4 for a rise of 6.392%.

In accordance with this increase, Table A, Page 13 will change as follows:

<u>For New Projects</u>	<u>Building Costs</u>	<u>Demolition</u>	<u>Site Work</u>	<u>Waste Treatment</u>
New Elementary K-6	\$30.00 (From \$28)	No		Change
New Elementary K-8	\$31.00 (From \$29)	No		Change
New Intermediate or Junior High School	\$33.00 (From \$31)	No		Change
New High Schools	\$35.00 (From \$33)	No		Change

## A. BASIC UNIT COST INCREMENTS THAT WOULD BE ELIGIBLE FOR STATE CONSTRUCTION AID

For New Projects 10,000 square feet or larger	Building Costs Including Fixed Equipment (or equivalent) & Fees (Per Square Foot)	Demolition (Where necessary) (Per Sq.Ft. New Bldg.)	*Site Work (Excluding waste treatment) (Per Sq.Ft. of Bldg.)	*Waste Treatment Facilities (When not on Town Sewer) (Per Sq.Ft. of Bldg.)
New Elementary K-6	\$28.00	\$1.00	\$2.50	\$1.50
New K-8	29.00	1.00	2.50	1.50
New Intermediate or Junior High School	31.00	1.00	3.00	2.00
New High Schools	33.00	1.00	3.50	2.00

B. For remodeling of existing educational spaces, maximum eligible building cost to be 50% of above figures.  
For site work and/or waste treatment where applicable, above figures to apply.

C. For conversion of existing non-educational spaces to educational use, maximum building cost to be 65% of above figures. Above figures to apply on site work and/or waste treatment where applicable.

D. Additional Increments for Special Circumstances:

To basic figures for building cost (A above) add the following. Figures for site work and/or waste treatment to remain as above where applicable.

1. For additions add to previously determined unit cost, an increment that will vary from 5% for addition of 10,000 square feet or more to a maximum of 15% for projects of 1000 square feet or less.
2. For projects 10,000 square feet or less, other than additions add to previously determined unit costs, an increment that will vary from 0% at 10,000 square feet to a maximum of 10% for projects of 5,000 square feet or less.

3. For Special Education projects, or areas within projects, add 10% to previously determined cost increment.

E. Cost Index relationship: Unit costs are as per July 1, 1974. Will be subject to annual readjustment to nearest .50 per square foot in accordance with change in Building Construction Cost Index for New England as published by F. W. Dodge Corporation.

\*F. In the event of unusually difficult and unavoidable site conditions engendering more than normally expensive site work or waste treatment facilities, the unit cost increments for these areas may be increased by the Commissioner of Education. The Commissioner's rulings in such cases may be appealed by the local district to the State Board of Education.

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